

The Social Exclusion of Children in North America

By

Shelley Phipps and Lori Curtis
Departments of Economics and Community Health and Epidemiology
Dalhousie University
Halifax, Nova Scotia
B3H 3J5
Ph: 902-494-6987 or 7043
E-mail: Shelley.Phipps@dal.ca or Lori.Curtis@dal.ca

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WHEREAS mankind owes to the child the best it has to give(United Nations, 1959)

Being poor means: you can't buy food. You don't have a place to live. You can't buy a Nintendo. You can't have nice clothes . . . You can't go to the movies. . . You can't do what you want to do (Ashley, age eight, whose family lives below the Canadian poverty line, cited in Baxter, 1993).

1. Introduction

Almost everyone who writes a paper about social exclusion begins from the idea that it is hard to explain what social exclusion *is*! Thus, like 'health' and 'well-being,' 'social exclusion' has many alternative definitions usually with the common element that it is a multi-dimensional construct including social, cultural, environmental, physical and mental aspects. The idea of social exclusion appears to have originated in France in the 1970's. Rene Lenoir, the French Social Action Secretary of State in the Chirac government coined the phrase, referring to people 'with mental and physical disabilities, the suicidal, aged, abused children and youth drop-outs, adult offenders, as well as substance abusers' (Ebersold, 1998).

Duffy (1995) defined social exclusion as "low material means and inability to participate effectively in economic social and cultural life, and, in some characteristics, alienation and distance from mainstream society."

Atkinson (1998) points out that while closely linked to both unemployment and poverty, social exclusion is not the same as either. In defining social exclusion, he emphasizes three dimensions: 1) relativity; 2) agency; 3) dynamics. While poverty debates have spent much time on the issue of the appropriateness of relative versus absolute measures, an 'absolute' measure of social exclusion has no meaning. An individual can only be excluded from a particular social group in a particular place and at a particular time -- social exclusion is fundamentally a relative concept.¹ Economists are much more used to modeling agency, or choice behaviour, but the key

¹ As economists we are most comfortable in analysing individual behaviour, yet the social group is an essential concept for the discussion of social exclusion.

point about social exclusion as outlined by Atkinson is that it is ‘something which happens to you’ rather than something you choose for yourself. Thus, an individual choosing to be a hermit is not socially excluded. Finally, the idea of social exclusion encompasses the idea of ‘bleak expectations.’ That is, current low-income or unemployment need not mean social exclusion if you expect things to improve shortly; these experiences are more likely to mean social exclusion if you have no reasonable expectation of escape.

Some authors conceive of social exclusion in terms of the denial of basic rights.² Room (1995), for example, talks of social exclusion as ‘denial or non-realization of civil, political, and social rights of citizenship.’ The *European Observatory on National Policies for Combating Social Exclusion* was established in 1989 with the goal of monitoring the ‘social rights of citizenship to a basic standard of living and to participation in major social and economic opportunities in society’ (Freiler, 2000). The definition of social exclusion adopted for the Poverty and Social Exclusion (National Strategy) Bill, presented to the House of Commons, in the United Kingdom, on 10th February 1999 specifies that “any individuals who are excluded from participating fully in the economic, social, cultural or political life of the nation” are socially excluded; those who are socially excluded are deprived of their civil rights and are therefore unable to make their proper contribution to society (UK House of Commons, 1999).

Klasen (1998) argues that, taking up this perspective, we might conceive of social exclusion as the denial of the ‘last 3’ of Sen’s (1992) basic capabilities: a) ‘being integrated into the community’; b) ‘participating in community and public life;’ c) ‘enjoying the social bases of self-respect.’ As Klasen (1998) points out, viewing the socially excluded as those who have been denied basic social rights puts the onus of policy response on society to amend the situation. Otherwise, if we are, for example, just worried about the negative outcomes which may be associated with increased social exclusion, then we don’t *have* to do anything about exclusion itself, though it may be a wise policy decision to offset what might otherwise be associated costs

² See also Osberg, 2000.

(e.g., increased health care costs) or negative externalities (e.g., increased crime).

As is clear from the discussion above, much of the social exclusion literature takes an adult-focused rather than a child-focused perspective (see Phipps, 1999).³ Of course, some dimensions of exclusion seem relevant in either case (e.g., low-income or social isolation). However, being excluded from productive employment or from political participation is something which an adult rather than a young child might experience, though the parent's experience may of course affect the child. More relevant from a child's perspective might be feeling socially isolated at school or being excluded from 'extracurricular' activities such as clubs or sports teams. In the first major section of our paper, we build upon Phipps, 1999a and b to provide a conceptual discussion of what it means for a child to be 'socially excluded' and how we might measure this. Throughout, we focus primarily on children aged 6 to 13 years – some of our discussion may be less appropriate for pre-school children or teenagers.⁴

In the second major section of the paper, we make use of 1996 data from the Statistics Canada Longitudinal Survey of Children and Youth (NLSCY) and the 1996 US National Survey of Youth -- Mother Child Survey to provide an exploratory empirical investigation of the extent of social exclusion among young children (age 6 to 13) in North America, where the concept has not yet gained the same prevalence as in Europe (though see, for example, Hatfield, 2000).

We are first interested simply in providing a descriptive analysis of a variety of alternative aspects of 'childhood social exclusion.' While we are limited by the available comparable data, we have chosen a set of 5 aspects of childhood social exclusion. We do not argue that these are 'the best,' but simply that they are 'a reasonable beginning.' Dimensions of childhood social exclusion included in our analysis are: 1) 'activity limitation' (i.e., the child is reported to have

³ D'Ambrosio and Gradin, 2000; Freceerova, 1998; Klasen, 1998; Magreb, 1998 and other authors in this volume are exceptions.

⁴ Rather obviously, given the developmental differences between an infant and a 17 year-old, what it means to be a 'socially excluded child' will depend crucially upon the age of the child.

health problems which limit his/her ability to participate at school, at play, etc in ways which are 'normal' for children of the same age); 'ill health' (poor or very poor health status as reported by the mother); poor performance at school; 3) 'social isolation from peers;' 4) 'recreational isolation' (i.e., lack of participation in clubs/sports/groups).

We want to assess, first, the extent of correlation across various aspects of the social exclusion of a child. How strong are the correlations? How many children experience exclusion in multiple dimensions? How does this compare across Canada and the US? We are also particularly interested in the link between parental social exclusion and childhood social exclusion. That is, if the parent is socially excluded, is her child likely also to be excluded? To examine such associations, we estimate Poisson⁵ models of the number of exclusions experienced by the child as functions of measures of various measures of adult exclusion, controlling for other relevant socio-demographic characteristics.⁶ The final section of the paper offers some preliminary conclusions and policy discussion as well as suggestions for further research.

Our paper focusses upon the concept of social 'exclusion' rather than 'inclusion,' and we argue that 'inclusion' is not simply the 'flip side' of 'exclusion.' If an individual is to be 'included,' then we must define the norm into which they must fit. While this is apparently also true for 'exclusion' (i.e., we must define the norm from which the individual is excluded), we prefer to analyse 'exclusion' because we worry about a possible coercive side to 'inclusion' – that attempts may be made to force individuals to 'fit in' to the mainstream if social inclusion is adopted as an important goal. Some groups may not wish to be assimilated, but would nonetheless prefer at least to have the *option* of participating in the mainstream (i.e., they may not wish to be involuntarily excluded). Examples of people who would not necessarily want to become 'mainstream' include First Nations and Deaf individuals as well as some immigrants; each of these groups may wish to preserve cultural diversity.

⁵ All models were also estimated both as 'tobit' and 'ordered probits,' yielding identical results, qualitatively.

⁶ In future work, though we will be limited in the Canadian case by data availability, we would like to investigate the persistence of exclusion over the 'longer term' (e.g., from 1994 to 1998).

2. The Social Exclusion of Children? Issues and Ideas

Phipps 1999a and b argues that it is important to pay attention to the well-being of children today, while they are children, as well as tomorrow, after they become adults. Much of the economics literature which focuses upon children has been primarily interested in the *eventual* attainments of children (e.g., level of education attained; earnings in the labour market). That is, the perspective adopted often has an investment flavour. And, this is of course of vital importance since we very much care what happens to our children after they grow up. But, we also care about children while they are children. They are members of society *now* who should be taken into account in any assessment of social well-being, for example, or in any discussion of social rights.

When we begin to think about the social exclusion of children, we should not think of children simply as miniature versions of their parents. How, then, do children differ from adults and how might this matter if we are thinking about the social exclusion of children, while children?⁷

One very important difference between children and adults is that it is rare for children to live alone.⁸ Much of the discussion of social exclusion is in terms of individuals. Yet, individuals associate together in groups of various size and shape. For young children, the most important group is undoubtedly the family, and in fact most of our data about dimensions of social exclusion such as low-income or consumption standards are only available at the level of the family. The debate about whether poverty should be measured at the individual level or at the family level is a

⁷ Again, our focus is on children aged 6 to 13 years.

⁸ This is not to deny that there are children living alone on the streets.

common one in the literature on measuring poverty,⁹ and researchers have debated about whether it is possible to be a poor individual living with a non-poor family or a non-poor individual living within a poor family.¹⁰ Of course, this literature is asking about how much sharing of financial resources goes on within families. This is a relevant question for social exclusion as well, but it seems that the issue is broader in this context.

Is it possible to be a non-socially excluded child living with a socially excluded parent, or within a socially excluded family? (Presumably, families or even neighbourhoods as well as just individuals can be socially excluded. See also, Hills, 1999 or Klasen, 1998.) It is possible to imagine an immigrant child who becomes fluent in the local language at school and whose parents work very hard in dead-end jobs to provide the child with consumption standards to match those of other neighbourhood children. Is it possible to be a socially excluded child living with a non-socially excluded parent or within a non-socially excluded family? An abused child would qualify; as potentially might a seriously handicapped child. For example, many Deaf adults recount stories of childhood family dinners during which they sat silently unable to follow any of what was going on, yet like other well-behaved children, they were made to sit until everyone had finished eating. In thinking about social exclusion, we have to keep in mind that the child is an individual separate from his or her parents, though vitally dependent upon them.

If we are to understand the social exclusion of children, while children, some of these connections between parental/family-level social exclusion and child social exclusion seem central. In general, one could imagine that everyone in the family could share an experience of exclusion as a result of low-income or as a result of receiving a stigmatizing transfer, for example, but this need not always be true.

Consider, next, the three elements of social exclusion outlined by Atkinson (1988). First,

⁹ See, for example, Ruggles, 1990.

¹⁰ See Jenkins, 1991 or Phipps and Burton, 1995.

relativity seems as important from the perspective of most children as it is for most adults, though this may be less true for infants or very young children who are less aware of what others have. On the other hand, relative consumption standards may be *more* important for older children/teenagers than adults, for example. It is, however, possible that children define their groups differently from adults (e.g., from the child's perspective, what peers at the local school have/do might matter more than what is true at the larger community level).

Atkinson also discusses 'agency' -- the idea that social exclusion is something that happens to you rather than something you have chosen for yourself.¹¹ It can reasonably be argued that children have much less agency than adults. Most of the really important things that happen to them are not in any sense a matter of personal choice. For example, family income/consumption levels, divorce/separation of parents, family moves, and school attendance are all determined by parental or social choices. This is not to deny that children, particularly older children, are agents who make decisions which affect some of their own outcomes (e.g., how hard they work at school), but typically the scope of the decisions available to a child is much more limited than the scope of decisions made by parents or society (e.g., whether or not the child must go to school). This vulnerability of children to the decisions of others is probably what makes it possible for politicians with very different perspectives prepared to agree that child poverty should be reduced.¹² At any rate, it seems we can worry less about agency when considering the social exclusion of children, particularly younger children.

The third aspect of social exclusion discussed by Atkinson (1988) is dynamics. His idea is that people are not excluded so much because of their current situations but because of their future prospects. Thus, a university student may be poor, but his prospects may be very good and he is thus less likely to be socially excluded than a lone mother with the same income who has no

¹¹ Note that the idea of something happening to you which was not somehow the result of an optimizing choice is inconsistent with much of economic theory.

¹² In 1989 in Canada, an all-party committee unanimously voted to eradicate child poverty by the year 2000. They were not successful -- in fact child poverty has increased since that time.

reasonable expectation of future improvement of her situation.

We think it is safe to argue that children have higher discount rates than adults. Hence, from their own perspectives, the future is not something to be particularly worried about (though we may worry very much on their behalves). On the other side, the present can seem all-important to a child. Social exclusion which lasts for only a year or two can constitute a major portion of a young child's life. Moreover, there may be no 'going back' -- development is a cumulative process so that interruptions/delay at an early age can have irreversible consequences (see Hertzman, 2000).

What, then, of a 'rights-based' interpretation of the social exclusion of the child? Consider, again, the Room (1995) conception of social exclusion as a 'denial or non-realisation of civil, political, and social rights of citizenship.' Since children are not legally able to participate in the political process (e.g., by running for office or voting), denial of the right to political participation is presumably less central for children, while children. However, as citizens they do have civil and social rights, and a child who is denied such rights might well be regarded as a 'socially excluded child.' The 1959 United Nations Declaration of the Rights of the Child provides an extremely useful expression of rights of particular relevance to children. Consider the following examples:

The child shall enjoy special protection, and shall be given opportunities and facilities, by law and by other means, to enable him to develop physically, mentally, morally, spiritually and socially in a healthy and normal manner and in conditions of freedom and dignity (Principle 2).

The child who is physically, mentally or socially handicapped shall be given the special treatment, education and care required by his particular condition. (Principle 5)

The child, for the full and harmonious development of his personality, needs love and understanding. . . . (Principle 6).

The child is entitled to receive education, which shall be free and compulsory, at least in the elementary stages. He shall be given an education which will promote his general culture and enable him, on a basis of equal opportunity, to develop his abilities, his individual judgement, and his sense of moral and social responsibility, and to become a useful member of society (Principle 7).

In thinking about the social exclusion of children, a rights-based approach has much to offer provided we remember to incorporate both current rights as well as ‘future’ or ‘developmental’ rights.

3. An Empirical Examination of Social Exclusion Among Children in North America

It is worth emphasizing that we regard our empirical work as highly exploratory. But, since relatively little is known about the social exclusion of children in North America, we hope that this effort is a useful step forward.

As argued above, it is important to be sensitive both to the current social exclusion of children, while they are children, and to the eventual social exclusion of the children as they develop into adults. Many writers have emphasized the dynamic aspect of exclusion -- that is, that exclusion is a *process* rather than just a state (e.g., Hills, 1999). Surely this is nowhere more apparent than in reference to the social exclusion of children.¹³

Unfortunately, the survey information which we have available seems rather colourless in contrast with the rich canvas of conceptual discussion surrounding social exclusion. Nonetheless, we have chosen 5 measures which we believe provide a useful beginning picture of childhood exclusion. Moreover, since we are interested in comparing the experience of social exclusion by children living in Canada and the United States, we have chosen 5 measures which are meaningful

¹³ While we would like to examine the ‘persistence’ of exclusion over the longer term, the data available to us do not make this possible.

for both countries and available on a comparable basis in the two data sets we employ for our analysis.¹⁴

Two of the dimensions which we study -- lack of success at school and general ill health -- seem particularly relevant for the *development* of exclusion. If we believe, for example, that participation in the labour market and in the political process are important for adults to be socially included, then the development of human capital (e.g., education and health) during childhood will be vital for the development of social exclusion/inclusion.

The other three dimensions of social exclusion which we study -- inability to participate in activities normal for other children the same age; poor relations with peers; lack of participation in organized recreational activities -- seem particularly relevant for the child's experience of social exclusion *now*. (Although, in fact, developing good social skills through peer interaction, for example, may be a form of 'soft' human capital acquisition which is just as important for the child's eventual labour market success as learning physics at school.) Legally, children aged 6 to 13 years living in Canada and the US are excluded from the political process and from the labour market. What then would replace these 'adult' dimensions of exclusion for a child? We argue that inability to participate in 'normal activities,' lack of participation in organized recreational activities and poor relations with peers are all relevant aspects of childhood social exclusion.

In all of the work presented in this paper, we divide children into a 6 to 9 year-old group and a 10-13 year old group. Although we focus on basically the same indicators for both groups, for the older group we are able to make use of responses actually provided by the children themselves rather than upon reports made by the mother, about the child. We argue that the *child's* perception of his/her social exclusion now is most relevant if we want to take a 'child-

¹⁴ A study of the social exclusion of children in either country alone might include indicators which we do not have, either because the information is not available for one of the countries or because the indicator makes less sense for one country than the other and we would not want to have different numbers or kinds of indicators for comparative purposes. For example, a relevant indicator for the United States which would be less applicable in the Canadian context might be 'exclusion from health coverage' (though Curtis, Kingston-Riechers and Phipps, 2000 present evidence that poor children in Canada have less access to medical care).

centred perspective,’ and research by Curtis, Dooley and Phipps (2000) makes the point that parents and children do not always agree about what the child is experiencing.

Notice that our list of 5 dimensions of childhood social exclusion does *not* include any of the more usual measures of adult social exclusion, though as argued above, some of these (especially low income) may also be aspects of childhood social exclusion. Later in the empirical work, we examine the connections between more typically ‘adult’ or ‘family-level’ measures of exclusion and the child measure which is developed here.

To be specific, we focus on four markers of ‘parental/family social exclusion’: 1) low-income status,¹⁵ 2) non-home ownership; 3) low-maternal education; and 4) having social assistance as the major source of household income.

Poverty status is typically a cornerstone of most definitions of adult social exclusion (see, for example, Atkinson, 1998). While less emphasized in the literature, having few assets seems as important as having low income and thus we include ‘non-home ownership’ as a proxy measure. As well, we include an indicator that the family’s major source of household income is social assistance since in both Canada and the United States social assistance is regarded as a stigmatizing transfer (Having social assistance as the main form of household income could also proxy exclusion from the labour market.). Each of these measures are ‘household-level’ measures of potential social exclusion; we want to assess the degree to which they are associated with a more narrowly child-focussed measure of social exclusion.

Not having a high-school education may also be a marker for adult social exclusion (see also Brandolini and D’Alessio, 2000). While in this case it is the parent and not the child who does not have a good education, and this is not a shared experience in the same way as poverty may be a shared experience, having a parent with low education may nonetheless affect childhood

¹⁵ We use a 50 percent of median income definition and an OECD 70:50 equivalence scale, with median incomes constructed using SCF data for Canada and CPS data for the US.

social exclusion.

Note that while there has been significant emphasis in the social exclusion literature on the link between social exclusion and the labour market¹⁶ -- particularly long-term unemployment or dead-end jobs (see Atkinson, 1988; Haataja, 1999, for example) -- we do not include parental unemployment as a marker for parental social exclusion. Recall that all of the parents studied in our samples are *mothers*. In investigating the data, we were left with the impression that many women identify themselves as ‘at home mothers’ rather than as ‘long-term unemployed paid workers.’¹⁷ This may be an interesting gender difference in the experience of social exclusion -- women more readily have an alternative socially acceptable role in which they can identify themselves should they lose paid work.

It is also, of course, true that large numbers of women with children *choose* to remain at home to care for their young children (or increasingly for their infirm parents). To the extent that caring work has always been more important form of work for women than for men, social exclusion as a result of negative labour market experiences may be less central for women than for men. Lack of other forms of social support may be relatively more important for women who stay home to care, which can be a socially isolating experience and one which sometimes generates relatively little recognition. This information was not available in the data.¹⁸

¹⁶ Jackson and Scott in this volume provide an excellent discussion of how parental experiences in the labour market may affect the social exclusion of their children. For example, low income may generate financial stresses which may or may not be mediated through income transfers; long hours may generate time stress which may or may not be mediated through supportive employment policies.

¹⁷ It may simply be the case that the NLSCY and NLSY do not provide good indicators of unemployment status.

¹⁸ For Canada, we have a variety of measures of social support available to the mother, in the 1994 though not the 1996 version of the survey. Comparable data does not appear to be available for the US. However, since this seems a potentially fruitful indicator of exclusion for mothers, it is our intention to pursue this avenue of research. We also know that neighbourhood conditions are important for child outcomes (see Boyle and Lipman, 1998; Corak and Heisz, 1998; Curtis, Dooley and Phipps, 1999). Unfortunately, comparable indicators of neighbourhood across the Canadian and US data sets were not available.

Notice that while we are particularly interested in examining the links between household or adult aspects of social exclusion and the social exclusion of children, our purpose in this paper is exploratory and descriptive. An important extension of our work would be to focus upon the *process* by which parental social exclusion affects children's social exclusion. For example, it could simply be that parent and child *share* the same experience of social exclusion (e.g., stigma from social assistance receipt; an unsafe neighbourhood), or it could be that socially excluded parents are unable to provide conditions favourable to the inclusion of their children (e.g., they do not have enough time or money to enable the child to participate in organized sports or music lessons). Which of these interpretations is most appropriate seems a worthwhile question to pursue in future research.¹⁹

3a. Data.

Canadian estimates are based on the 1996 National Longitudinal Survey of Children and Youth (NLSCY). The US estimates are based on the 1996 National Longitudinal Survey of Youth, Mother-Child Survey. In each case, the survey was conducted during a visit to the respondent's home. The two data sets contain information that is extremely similar.

One difference across the surveys is whether or not the population of children in the country was the primary focus of the study. In Canada, children aged 0 to 11 years, in 1994, were the original focus. The main component of the survey consists of children living in households who had recently been part of the Labour Force Survey (thus households living in the North, on Indian Reserves or in institutions are excluded).

For the US, the parents were the original focus of the survey, with the questions about the respondent's children added at a later stage. The child data we use for the US are based on

¹⁹ In other research (see Curtis and Phipps, 2000), we have surveyed the large literature linking income/poverty to children's attainments; there is also much evidence that neighbourhood conditions affect children's well-being (see for example, Ginther, Haveman and Wolfe, 2000). These are, of course, narrower questions than how parental social exclusion affects children's social exclusion, but each piece must be relevant.

questions asked of the original NLSY respondents about their children. The survey was not designed to obtain a nationally representative sample of children, as was true for the Canadian data. Fortunately for the sake of making the international comparisons proposed for this paper, the key limitation of the survey is that given the current ages of the parents, the child sample is most representative of *younger* children (mothers in the US would be between the ages of 30 and 38 in 1995). Estimates for the US are considered fully representative of the national population of children for younger children, but not for teens or young adults.

The Canadian NLSCY only contains information about children aged 0 to 13 years, and thus we only compare outcomes for children in this age range, the relative youthfulness of the US parents is not a serious problem for this analysis. Moreover, while the range of parental age is greater for Canada than for the US, mean age of mother is nearly identical. We choose to focus on the full samples for Canada since this gives the best information about child outcomes in these countries.

In the Canadian survey, the person answering the questions is the 'person most knowledgeable about the child' (pmk) -- the mother in 90 percent of cases for the Child Questionnaire. For the US survey, only female respondents with children were asked about their children. Thus, the child sample consists of all children born to NLSY female respondents who were living in their mother's household at the survey date (several surveys have been carried out - we use the 1996 survey). Therefore, we restrict the Canadian data to observations where the pmk was the mother (90% of the cases) to be consistent with data from the United States.

We also restrict the sample by age. Children who are less than 6 years of age, in 1996, are excluded from the survey for consistency across our dimensions of social exclusion. In the Canadian data parents of children under 6 are not asked about the child's success at school. As well, many of the questions in the survey are worded differently for children under 6 than for those 6 or older. Furthermore, we divide our data into two subgroups by age, children from 6- 9 and children from 10-13, because children 10 and over answer personally while the pmk answers

for children under 10 years of age for the ‘activity limitations,’ ‘social isolation from peers’ and ‘recreation’ dimensions.

For each data set, a small number of individuals did not answer particular questions about children’s well-being. These observations are excluded as appropriate. An exception is for the income variable; our frequencies include individuals who did not report income in the data. In the US data the sample of children from 6 -13 years of age is already relatively small, 1470. If we exclude children with missing information on income the sample size is reduced to 956 (52 % in the 6-9 age group). Sample size is much larger for Canadian children, with 8,063 observations for children aged 6-13 years, 7,872 observations (54% in the 6-9 age group) if we exclude observations with missing information. As we are interested in exploring the extent of social exclusion in North America the frequencies which we present include observations with and without income reported; the multivariate analysis, by necessity, excludes observations with non-response to the income question.²⁰

3b. Individual Dimensions of Social Exclusion

As discussed above, we consider five dimensions of childhood social exclusion.²¹ The first three dimensions of social exclusion might be regarded as particularly important from the perspective of the child now, and thus we are pleased that for the 10 to 13 year-old children, we have available the child’s own assessment of his/her experiences. The first dimension of childhood social exclusion is ‘activity limitation’ (i.e., the idea that child is unable to participate in

²⁰ Frequencies are similar for the full sample and for the sample with response to all questions used for the multivariate work.

²¹ An important pragmatic reason for choosing to study social exclusion rather than social inclusion is that the technical difficulties of measurement are substantially reduced. As outlined in Brandolini and D’Alessio (2000), if we were to attempt to measure the ‘extent of inclusion’ we would have decide how to add ‘apples and oranges’ – for example, how do we add ‘excellent health’ to ‘no recreational participation.’ We could, of course, mechanically switch our index of exclusion to an index of inclusion by making all the zeroes ones and vice versa, but as argued previously, we do not think this makes sense.

‘normal’ daily activities). The second dimension is ‘social isolation from peers’ (i.e., whether the pmk believes the child has problems in his/her relationships with friends for the 6-9 year olds; whether the child ‘has friends’ or ‘is lonely’ for the 10-13 year olds). The third potential dimension of childhood social exclusion considered is ‘recreational isolation’ (i.e., lack of participation in organized clubs, sports, music/art, etc).

The final two categories, health and success at school, while also important for the child’s well-being now, seem especially relevant for the future outcomes/exclusion of the child as he/she grows up. For both countries, we use the mother’s subjective assessment of the child’s over-all health status and over-all success at school for both the younger and older children (children’s personal assessments are not available for these categories).

While we do not claim that this is an exhaustive or even the ‘best’ list of dimensions of social exclusion, we do, as noted earlier, argue that it is at least a reasonable beginning. However, although guided by the conceptual discussion, we admit that our choice of dimensions of social exclusion is in the end limited, as is often the case in economics, by the data. The particular dimensions we have chosen are all available in and similar across the US and Canadian data.

However, while content is very similar across the data sets, number of response categories differs for the general health and peer relationship questions. For example, health is assessed according to five categories in Canada (excellent, very good, good, fair and poor) but only four categories in the US (excellent, good, fair and poor). On the other hand, while number of response categories is the same for the schooling success question (five), the exact wording of the labels is different (e.g., the child is doing ‘very well’ in Canada versus he/she is ‘one of the best students’ in the US). Exact survey questions and response possibilities are presented in Appendix 1 and full frequencies of answers to individual questions appear in Appendix 2.

Both appendices also provide detail about where we have drawn the threshold between ‘excluded’ and ‘not excluded.’ Dotted lines on Figures A2.1 to A2.20 indicate the ‘threshold of

exclusion' which we have chosen. For 'activity limitation' and 'recreational exclusion,' we begin with dichotomous variables (i.e., activity limitation or not; recreational participation or not²²). For the questions with four or five possible responses, we tried to make 'reasonable' decisions about where to establish exclusion thresholds taking into consideration both the wording of the questions/answers and the distribution of the observations across the answer categories. For example, as noted above, there were 5 possible categories for assessing general health in Canada but only 4 for the United States. However, both countries use the words 'fair' and 'poor' for the bottom two categories of health status and percentages of children in these categories are very similar across the countries for both age groups. Thus, we assigned a value of 1.0 to those children assessed as having 'poor' or 'fair' health and a 0.0 to those assessed with higher levels of health. Similar procedures were followed for each of the 5 dimensions of childhood social exclusion studied. These decisions are obviously somewhat arbitrary, but the same critique has been raised about drawing poverty lines and at this stage we do not have a consensus position upon which to draw. Details about social exclusion cut-offs are provided in the appendices so that readers can judge whether our choices are reasonable, but the main body of the text focuses, in general, upon discussing the dummy indicators of whether or not the child is 'socially excluded.'

3c. Empirical Results

A first basic description of individual aspects of social exclusion among children in North America is provided in Figures 1 and 2 (see also Table 3). First, about 4 percent of Canadian children and about 7 percent of US children are limited in their ability to participate in activities of daily life, though the difference is not statistically different across the countries.

²² For the Canadian survey, respondents were actually asked 4 separate questions about frequency of participation in organized recreational activities (1) sports with a coach; 2) dance, gymnastics, etc; 3) art, drama, music or clubs/lessons outside of class; 4) clubs such as Guides or Scouts, church or community groups). In order to be classified as a 'non-participant,' the child must have responded to each question that he/she never or almost never participated.

Peer relationships seem a particularly important component of childhood social exclusion, from the perspective of the child.²³ In both countries, roughly 10 percent of children between 10 and 13 report themselves as experiencing isolation from peers. Children between the ages of 6 and 9 seem to fare somewhat better, as reported by the mothers. Although there may well be differences between older and younger children, it is consistent with Curtis, et.al., 2000 to find that mothers perceive fewer problems than children. According to mothers, just over 1 percent of Canadian children age 6 to 9 have problems in their relationships with friends, versus 5.8 percent of US children. Again, there is no statistically significant difference across the countries in terms of how many children are excluded in regards to peer relationships.

One of the most striking aspects of childhood social exclusion, and the most notable difference between the two countries is ‘recreational exclusion.’ In the US, roughly one third of children, in both age groups, *do not* take part in organized recreational activities. In Canada, by contrast, ‘recreational exclusion’ is much less common, particularly for older children (only 9 percent do not participate).²⁴ Not surprisingly, the difference in rates of ‘recreational exclusion’ is statistically significant for older children. We plan to examine this quite striking difference between the countries in more detail in future research.²⁵

In both the US and Canada close to 98% of the children experience health which their

²³ This is arguably the least comparable dimension of childhood social exclusion as both number of categories and wording of responses differ across the countries. See Appendix 1 for details.

²⁴ Non-participation in organized recreational activities could occur for a variety of rather different reasons: 1) no such activities are available; 2) the family can’t afford the program or arrange the transportation; 3) the child may have a disability which is not accommodated by the program.

²⁵ As noted earlier, one important difference across the surveys is that Canadian mothers and children were asked a series of 4 questions about frequency of participation in specific activities while US respondents were a single question about any participation. While the list of activities noted in the two surveys is very similar, it is possible that this difference in the way the question was asked helps to explain the rather different level of reported recreational participation across the two countries. That is, it could be that the Canadian set of questions helps to prompt/remind respondents, and it is, further, possible that this prompting is particularly important for child respondents. In the US, mothers were also asked about the recreational participation of their 10 to 13 year old children -- 29 percent reported no participation in organized recreation, a remarkably similar number to the 34 percent reported by the children.

mothers classify as good or better (and there is no statistically significant difference between the countries in terms of poor health). Mothers also report that children from both countries fare well at school. Fewer than 4 percent of Canadian mothers (of either 6-9 or 10-13 year olds) report their children to have less than average levels of over-all success at school!! In the US, just over 5 percent of children between 6 and 9 years of age and approximately 11 percent of 10 - 13 year olds are rated as below the middle. Thus, older children in the US are reported to have significantly more problems at school.

If 'social exclusion' is a multidimensional phenomenon, then we might hypothesize that children will tend to be socially excluded on more than one dimension. To investigate the multidimensionality of social exclusion, we first calculate correlations across individual dimensions of social exclusion. We then construct a single 'social exclusion score' simply by counting the number of dimensions in which the child is categorized as 'socially excluded.'

Tables 1 and 2 present correlation statistics²⁶ across dimensions of childhood social exclusion. The main point to take from these tables is that the correlations are surprisingly small.²⁷ In fact, many are not statistically different from zero. For Canadian children 6 to 9 years of age, Table 1 (top half) indicates that the only correlations greater than 0.2 are between activity limitations and poor child health, 0.26. Poor relations with friends is correlated at 0.16 with not successful at school and at 0.15 with poor health. All other correlations are well below 0.10. Table 1 (bottom half) indicates that for Canadian children between 10 and 13 years of age, the only correlations greater than 0.20 are between activity limitations and poor health, 0.24. Not successful at school and poor health, is correlated at 0.13.

The pattern of correlation is similar in the US. Table 2 (top) presents the statistics for 6 to

²⁶ Note that these are all correlations between dichotomous (0/1) variables. Hence, the reported value is a 'phi-statistic' (see Wherry, 1984).

²⁷ These results are consistent with those reported for adults in the UK by Le Grand (2000) and for all individuals in Italy by Brandolini and D'Alessio (2000).

9 year old children in the US. The only dimensions with correlations close to 0.2 are activity limitations and poor friendships, 0.21, activity limitations and poor health, 0.18, activity limitations and little success at school, 0.20 and finally, no participation in organized activities and little success at school, 0.19. For the 10 to 13 year olds, Table 2 (bottom), activity limitations and poor health are correlated at 0.23, the only pair with correlation statistics greater than 0.20. Activity limitations and no organized activities, poor relationships with friends and no organized activities, no organized activities and poor health and no organized activities and no success at school are all correlated at 0.10 to 0.12. Although the pattern of correlations seem similar across the US and Canada exclusion from organized activities seems to be more related to other dimensions of exclusion in the US.

The multi-dimensionality of social exclusion is further explored in Figures 3 through 6 which illustrate frequencies for the *number* of dimensions in which a child is ‘socially excluded.’ Over-all, fewer children are socially excluded in Canada than in the US (driven primarily by the difference in rates of participation in organized recreation), and this is particularly marked for 10 to 13 year old children (76.5 percent of Canadian 10 to 13 year olds are not excluded in any dimension considered; 52.3 percent of US 10 to 13 year olds are not excluded in any dimension). This finding is consistent with previous work comparing the well-being of children in the two countries using Sen’s functionings perspective which finds that Canadian children are generally, though not always, better off than children living in the United States.²⁸

In both countries, and for both age groups, the majority of socially excluded children tend to be so on only one dimension. In Canada, 20.4 percent of 10 to 13-year olds are excluded in exactly one dimension; in the United States, 33.4 percent are excluded in one dimension. In Canada, about 2 percent of children of either age are excluded on 2 or more dimensions (though

²⁸ For example, Canadian infant mortality rates are lower, Canadian children are less likely to have been low-birth-weight babies, they are less likely to have activity limitations, they are less likely to be poor, they are less likely to be disobedient at school, to be cruel or bullies, to lie or cheat. However, they are more likely to be anxious or frightened or to be restless. There is no difference in accident rates or in trouble concentrating. See Phipps, 1999, which takes a ‘functionings’ approach to comparing the well-being of children in Canada, the US and Norway.

remember that this means that 86,509 Canadian children are estimated to be socially excluded in *multiple* dimensions). In the US, approximately 9 percent of children aged 6 to 9 and 15 percent of those aged 10 to 13 are excluded on multiple dimensions (representing a total of 3.6 million multiply excluded children).²⁹ While it is of course much better that the counts for only 1 dimension of social exclusion are higher than the counts for multiple dimensions of social exclusion, we should not be complacent about having one quarter of our 9 to 13 year old children experiencing any social exclusion. Moreover, it is surely an appalling state of affairs that an estimated 2626 Canadian 9 to 13 year olds (86,509 US children) are socially excluded on *4 or 5* dimensions.

Tables 3 and 4 explore the links between parent and child social exclusion. We are particularly interested to know if children with socially excluded parents, or children living in socially excluded families, are more likely than other children to be socially excluded according to our measure of childhood exclusion. As discussed above, we proxy parental social exclusion through a set of dummy variables to indicate that: 1) the family is poor³⁰; 2) the family does not own their own home (a proxy measure of asset accumulation); 3) the mother has a low level of education; 4) social assistance is the main source of household income.

Table 3 indicates some interesting differences between Canada and the US in these indicators of parental/family social exclusion, almost all of which are higher in the United States. Specifically, more children live in poor families in the US than in Canada (32 percent in the US versus 22 percent in Canada for 10-13 year old children);³¹ more US families with children do

²⁹ Although the distributions are statistically different across countries for both age groups, interestingly they are not statistically different between age groups in either country.

³⁰ The poverty line is calculated as $\frac{1}{2}$ the median equivalent income for the whole country. Since the NLSCY only includes households with kids 0-13, the Survey of Consumer Finance, Economic Families, income year 1996 is used. Similarly, the Luxembourg Income Study is used to calculate the poverty line for the US. Household income is divided by the OECD equivalence scale where the first adult is counted as 1, all other adults are counted as .7 and children under 18 are counted as .5.

³¹ Note, however, that poverty rates are more similar in these data sets than is usually the case. We have pointed out in other work (Curtis and Phipps, 1999) that the NLSCY over-estimates child poverty compared to the SCF

not own their own homes (35 percent do not own their own homes in the US versus 20 percent in Canada, for the 10-13 year old children³²); fairly similar percentages of children have social assistance as the main source of household income (about 6 percent in Canada and about 5 percent in the US); more mothers have less than high-school education (20 versus 13 percent). Note also that more children live in lone-mother families in the United States than in Canada (33 versus 13 percent³³).

We examine the linkages between child and parental exclusion using multivariate techniques. Since our dependent variable counts the number of dimensions in which a child is excluded, it is appropriate to estimate using ‘count data techniques’ (see Cameron and Trivedi, 1998 for example). When a dependent variable is non-continuous (ours can take *only* the values 0,1,2,3,4 or 5), then the standard normality assumption underlying estimation techniques such as ordinary least squares or ‘tobit’ analysis are inappropriate. Instead, we estimate a Poisson regression model (see Cameron and Trivedi, 1998; Greene, 2000; Wooldrige, 2000). The Poisson is appropriate when the dependent variable is a count variable (i.e., it consists only of non-negative integers) with a high probability of the count being equal to zero. This assumption is clearly satisfied in our case, since the majority of children studied are not socially excluded in even one dimension. A characteristic of the Poisson distribution which is overly restrictive in many applications is that the variance is equal to the mean. However, as indicated in Table 4, we are unable to reject the hypothesis that the Poisson is the appropriate distribution to use in our case.

The most important explanatory variables which we include in our model of the number of dimensions in which a child is socially excluded are the four ‘parental exclusion’ variables: low-income status; low education level of the pmk; non-home-ownership and a dummy to indicate that

while the NLSY under-estimates child poverty compared to the CPS.

³² Comparable estimates for 10-13 year old children using LIS data are 22 percent non-homeownership in Canada and 33 percent non-homeownership in the United States.

³³ Again, comparable estimates for 10-13 year old children using LIS data are fairly similar at 27.5 percent lone mothers in the United States and 14.8 percent in Canada.

social assistance is the main source of family income. Regressions also control for age of child, age of mother, lone-parent status, female child, and number of children less than 18 years of age living at home. Means for all explanatory variables are reported in Table 3.

Table 4 reports the results of a Poisson model of the number of times a child is socially excluded (with the dependent variable thus ranging from 0 to 5). Columns 1 and 2 report results using the Canadian NLSCY, for children 6 to 9 years and 10 to 13 years of age, respectively. Columns 3 and 4 are the results for the US NLSY, for children 6 to 9 years and 10 to 13 years of age, respectively. Since it is hard to interpret the magnitude of estimated associations from the Poisson coefficients themselves, we instead report ‘incidence rate ratios.’³⁴

Notice, first, that family poverty is consistently associated with greater social exclusion of children, though the relationship is smaller for children aged 10 to 13 years than for the younger children, especially in Canada.³⁵ For 6 to 9 year old children living in the United States, the social exclusion rate of poor children is 1.56 times the rate for non-poor children; for 6 to 9 year old children living in Canada, the social exclusion rate of poor children is 1.81 times the rate for non-poor children.

Lack of home ownership is also associated with higher levels of social exclusion for younger children in Canada and for older children in the US. In Canada, 6 to 9 year-old children who do not live in owner-occupied housing have social exclusion rates which are 1.65 times those of otherwise identical children living in owner-occupied dwellings.

³⁴ The incidence rate ratio is an estimate of the expected number of dimensions in which the child in question is predicted to be excluded divided by the expected number of dimensions in which the ‘base case’ child is expected to be excluded.

³⁵ In fact, poverty status is not statistically significant at conventional levels for 10 to 13 year old children in Canada in the Poisson specification (p-value = 0.156). It is of course true that poverty status, home-ownership status, pmk level of education and social assistance status are highly correlated, generating problems of multicollinearity and hence large standard errors. All models were also estimated as tobits and ordered probits with no major qualitative difference in results, though poverty status is statistically significant at conventional levels in all cases when we estimate with these models.

Low level of maternal education is associated with greater social exclusion for all children – in fact, this is one of the strongest and most consistently significant variables in our estimated models. In terms of magnitude of association, Table 4 indicates that a 6 to 9 year old Canadian child whose mother had less than high-school education would have 1.78 times the social exclusion rate of a child whose mother had high-school or higher education; the equivalent figure for a 6 to 9 year old child in the United States is 1.54.

Finally, living in a family whose main source of income is social assistance is associated with higher levels of social exclusion for 6 to 9 year old children living in the United States (the social exclusion rate is 1.67 times the rate for other families, all else equal).

Although these results are, in general, consistent with expectations, there are also some surprising, in our view, inconsistencies. Living in a lone-mother family is associated with higher levels of child social exclusion for older children in Canada but *lower* levels for older children in the US. It is not statistically significant for the younger children in either country.

In sum, family poverty, lack of home ownership, social assistance receipt, and low levels of maternal education are forms of adult social exclusion that are consistently associated with higher levels of children's social exclusion. Thus, there appears to be a strong association between indicators of parental/family social exclusion and our indicator of childhood social exclusion.

4. Discussion and Conclusions

The first major section of this paper presents a conceptual discussion of social exclusion from the perspective of the child, since social exclusion has been more widely discussed for adults than for children. We argue that it is important to consider both the experience of social exclusion by children, while they are children, and the process by which children develop into socially excluded adults. We begin to consider some of the ways in which the social exclusion of a child might differ from the social exclusion of an adult. For example, children have less agency and higher discount rates than adults, though older children, in particular, may be particularly sensitive to relative consumption standards (though the groups with which they compare themselves may differ from those used by adults). We also ask whether social exclusion is something experienced by families or individuals within families? We note that children are individuals who may have different experiences from their parents, but that they are particularly dependent upon the key adults in their lives.

The second section of the paper uses microdata from the 1996 Canadian NLSCY and the 1996 US NLSY -- Mother-Child Survey to conduct an exploratory empirical investigation of the social exclusion of 6 to 13 year-old children in North America. We focus upon five aspects of childhood social exclusion. The first three dimensions might be regarded as particularly relevant for children while they are children (i.e., being limited in activities normal for children of the same age, having problems in relations with peers, not participating in organized recreational activities). For these aspects of social exclusion, we are able to use reports by the children themselves (for children aged 10 to 13). In general, we make use of reports by mothers. The last two dimensions of social exclusion would not only be important for the child today, but also for the *development* of exclusion in the child tomorrow (i.e., ill health; poor performance at school).

Over-all, social exclusion is more common among children living in the US than among children living in Canada. For 10 to 13 year-old children, 24 percent experience at least one dimension of social exclusion in Canada; 48 percent experience at least one dimension of social

exclusion in the United States. The major difference between the countries apparent in our data is that significantly fewer US children participate in organized recreational activities.

Since social exclusion is typically viewed as a multi-dimensional construct, we examine the correlations between dimensions of childhood social exclusion. These turn out to be surprisingly small (most correlations, where significant, were less than 0.20). Moreover, when we count the *number* of dimensions in which individual children might be regarded as ‘excluded’ we find that for those experiencing any ‘exclusion,’ it is most common to be excluded in just one dimension. However, approximately 2 percent of Canadian children (both age groups) and 9 and 15 percent of children aged 6 to 9 and 10 to 13, respectively, in the US are excluded on two or more dimensions. While as noted above, these empirical results are very preliminary and may be sensitive to our definition of social exclusion, our findings appear to indicate that it may be necessary to find policy solutions to *each* of the components of social exclusion discussed here (i.e., no easy ‘umbrella’ solutions seem likely).

Finally, we conduct a multivariate examination of the relationship between measures of adult social exclusion and our measures of childhood social exclusion. Family poverty, lack of home ownership, low levels of maternal education and having social assistance as the main source of family income were all associated with higher levels of social exclusion among children. Hence, we conclude that there is an important connection between markers of parental/family exclusion and the experience of social exclusion by children. Traditional anti-poverty programs are presumably not sufficient, but neither are they mis-directed if we wish to ameliorate social exclusion among children.

Our research is clearly restrictive in that we have focussed upon 6 to 13 year-old children using single cross-sections of microdata. It would be interesting in future research to examine the persistence of social exclusion over time (e.g., how many children who are socially excluded this year are also socially excluded next year; are they becoming more or less socially excluded). It would also be valuable to construct measures of the social exclusion of younger and older

children. Presumably different measures of social exclusion would be appropriate for children at different stages of their development. For example, perhaps sibling and/or parental relationships would be particularly important for pre-school age children as well as an indicator of involvement in a playgroup/pre-school/daycare (or some other place where peer interactions would be possible). For teenagers, it seems particularly important to use self reports rather than parental reports. As well, if we limited attention to a study of Canada alone, it would be possible to consider other dimensions of exclusion (e.g., housing conditions, neighbourhoods).

Another direction future work could take would be to move beyond the descriptive approach we have taken in this exploratory piece. To really understand how to reduce social exclusion among children in Canada, we need to know much more about the *process* through which social exclusion develops.

Table 1
Correlation Analysis³⁶
Canada 6 - 9 Year Olds

	Activity Limit.	Excluded Friends	No Organized Recreation	Ill Health	No Success at School
Activity Limitation	1.000 0.0				
Excluded Friends	0.0251 0.099	1.000 0.0			
No Organized Activities	0.0172 0.258	0.0037 0.807	1.000 0.0		
Ill Health	0.2592 0.0001	0.1525 0.0001	-0.0048 0.752	1.000 0.0	
No Success at School	0.0760 0.0001	0.1554 0.0001	0.0340 0.0256	0.0704 0.0001	1.000 0.0

Canada 10 - 13 Year Olds

	Activity Limit.	Excluded Friends	No Organized Recreation	Ill Health	No Success at School
Activity Limitation	1.000 0.0				
Excluded Friends	0.0134 0.0414	1.000 0.0			
No Organized Activities	0.0509 0.002	-0.007 0.658	1.000 0.0		
Ill Health	0.2438 0.0001	0.0479 0.0034	0.0099 0.547	1.000 0.0	

³⁶ Since the analysis variables are dichotomous, the Phi correlation coefficient is reported
 $\phi = (n_{11}n_{22} - n_{12}n_{21}) / \sqrt{n_{r1}n_{r2}n_{c1}n_{c2}}$ where n_{r} = row total and n_{c} =column total

Table 2
Correlation Analysis³⁷
US 6 - 9 Year Olds

	Activity Limit.	Excluded Friends	No Organized Recreation	Ill Health	No Success School
Activity Limitation	1.0000 0.0				
Excluded Friends	0.20763 0.0001	1.0000 0.0			
No Organized Activities	0.06502 0.0728	0.04611 0.2036	1.0000 0.0		
Ill Health	0.18342 0.0001	0.08984 0.0131	0.04237 0.2428	1.0000 0.0	
No Success School	0.19842 0.0001	0.08356 0.0211	0.18582 0.0001	0.01450 0.6895	1.0000 0.0

US 10 -13 Year Olds

	Activity Limit.	Excluded Friends	No Organized Recreation	Ill Health	No Success School
Activity Limitation	1.00000 0.0				
Excluded Friends	-0.04530 0.2254	1.00000 0.0			
No Organized Activities	0.11458 0.0021	0.12133 0.0011	1.00000 0.0		
Ill Health	0.22618 0.0001	-0.03373 0.3669	0.10328 0.0056	1.00000 0.0	

³⁷ Since the analysis variables are dichotomous, the Phi correlation coefficient is reported
 $\phi = (n_{11}n_{22} - n_{12}n_{21}) / \sqrt{n_{r1}n_{r2}n_{c1}n_{c2}}$ where n_{r} = row total and n_{c} =column total

Table 3 Variable Means				
	Canada		United States	
	ages 6-9	ages 10-13	ages 6-9	ages 10-13
Limited in Activity	3.8%	3.6%	6.9%	7.7%
Relationship with Friends is Poor	1.1%	10.4%	5.8%	9.7%
No Organized Recreation	21.0%	9.0%	29.1%	34.2%
Health is Poor	2.0%	1.4%	2.1%	2.3%
Success at School is Poor	3.2%	2.7%	5.5%	10.9%
Poor ¹	26.3%	22.0%	24.4%	31.8%
Home is NOT owned by household member	24.5%	19.9%	31.3%	35.0%
Mom has less than high school education	11.7%	13.3%	13.3%	20.1%
Age of child	7.5	11.5	7.5	11.4
Child is a Female	48.8%	49.0%	48.5%	47.1%
Lone Mom household	16.2%	15.1%	26.4%	33.0%
Number of kids <18 in household	2.4	2.3	2.6	2.5
Age of Mom	36.2	39.5	35.1	35.2
Main source of income is social assistance	7.7%	5.8%	4.4%	6.4%

¹ Note: The poverty line is calculated as ½ the median equivalent income for the whole country. Since the NLSCY only includes households with kids 0-13, the Survey of Consumer Finance, Economic Families, income year 1996 is used. Similarly, the Luxembourg Income Study is used to calculate the poverty line for the US. Household income is divided by the OECD equivalence scale where the first adult is counted as 1, all other adults are counted as .7 and children under 18 are counted as .5.

Table 4 Poisson Model of the Number of Exclusions Incidence Rate Ratios (robust standard errors in parentheses)				
	Canada		United States	
	ages 6-9	ages 10-13	ages 6-9	ages 10-13
Dummy=1 if poor ¹ in 1996	1.811* (0.180)	1.178 (0.136)	1.564** (0.283)	1.350** (0.176)
Dummy=1 if home is not owned by the spouse or respondent	1.650* (0.173)	1.163 (0.148)	1.100 (0.194)	1.515* (0.215)
Dummy=1 if the Mom has < high school	1.780* (0.173)	1.305** (0.161)	1.536** (0.305)	1.540* (0.187)
Age of the Child	1.002 (0.039)	1.025 (0.041)	1.062 (0.068)	1.164* (0.065)
Dummy=1 if the child is female	0.881 (0.072)	0.821** (0.074)	0.914 (0.123)	0.923 (0.109)
Dummy=1 if lone parent household	1.005 (0.127)	1.379** (0.176)	1.084 (0.208)	0.758** (0.099)
Number of children <18 in household	1.010 (0.040)	0.964 (0.053)	0.957 (0.060)	0.894** (0.043)
Age of the Mother	1.000 (0.008)	0.978** (0.009)	0.987 (0.032)	0.953*** (0.024)
Dummy=1 if Main Source of Income is Social Assistance	0.804 (0.121)	1.063 (0.216)	1.671** (0.385)	1.304 (0.251)
	n=4241 Wald Chi ² =219.80 Prob>chi ² =0.000	n=3641 Wald Chi ² =50.65 Prob>chi ² =0.000	n=496 Wald Chi ² =90.55 Prob>chi ² =0.000	n=460 Wald Chi ² =63.23 Prob>chi ² =0.000
	Goodness of Fit Chi ² =4060.3 Prob>Chi ² =0.970	Goodness of Fit Chi ² =3709.3 Prob>Chi ² =0.179	Goodness of Fit Chi ² =466.6 Prob>Chi ² =0.728	Goodness of Fit Chi ² =404.1 Prob>Chi ² =0.941
<p>* significant with 99% confidence **significant with 95% confidence ***significant with 90% confidence</p> <p>¹ Note: The poverty line is calculated as ½ the median equivalent income for the whole country. Since the NLSCY only includes households with kids 0-13, the Survey of Consumer Finance, Economic Families, income year 1996 is used. Similarly, the Luxembourg Income Study is used to calculate the poverty line for the US. Household income is divided by the OECD equivalence scale where the first adult is counted as 1, all other adults are counted as .7 and children under 18 are counted as .5.</p>				

Figure 1
Dimensions of Childhood Social Exclusions
Ages 6-9 Years

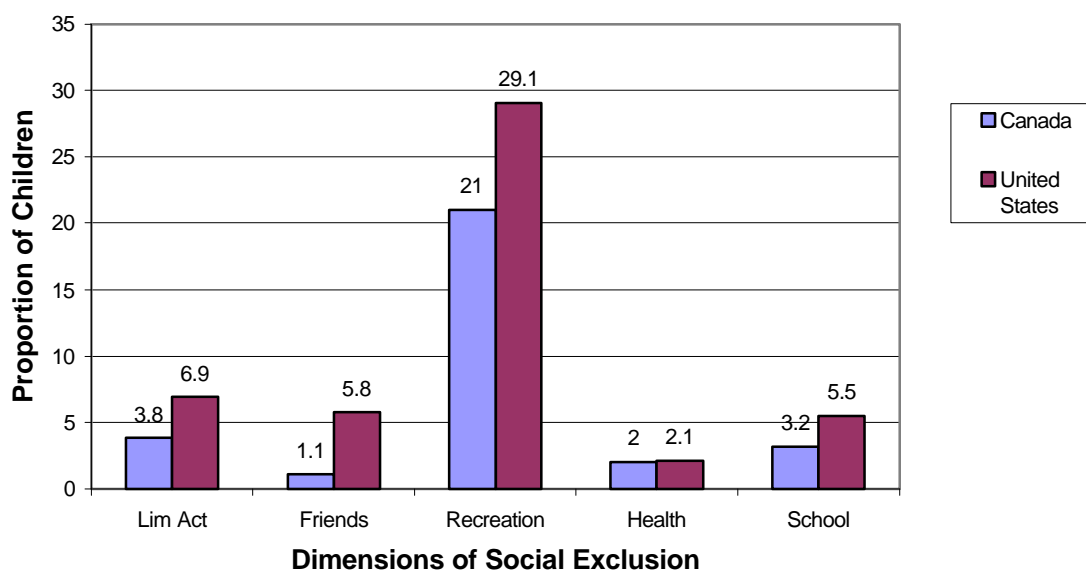


Figure 2
Dimensions of Childhood Social Exclusions
Ages 10-13

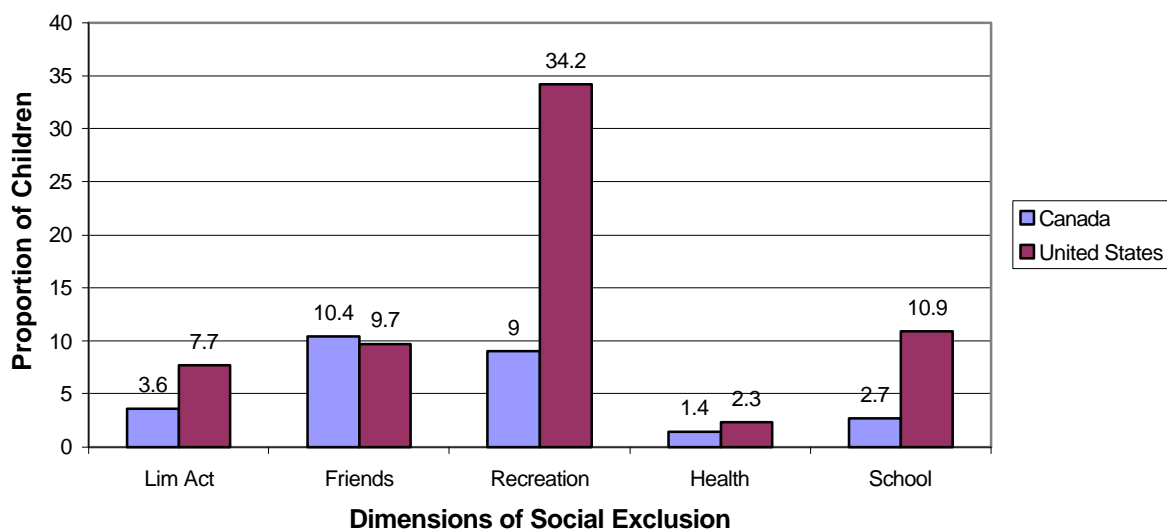


Figure 3
Number of Dimensions in Which Child is Socially Excluded
Canada Ages 6-9

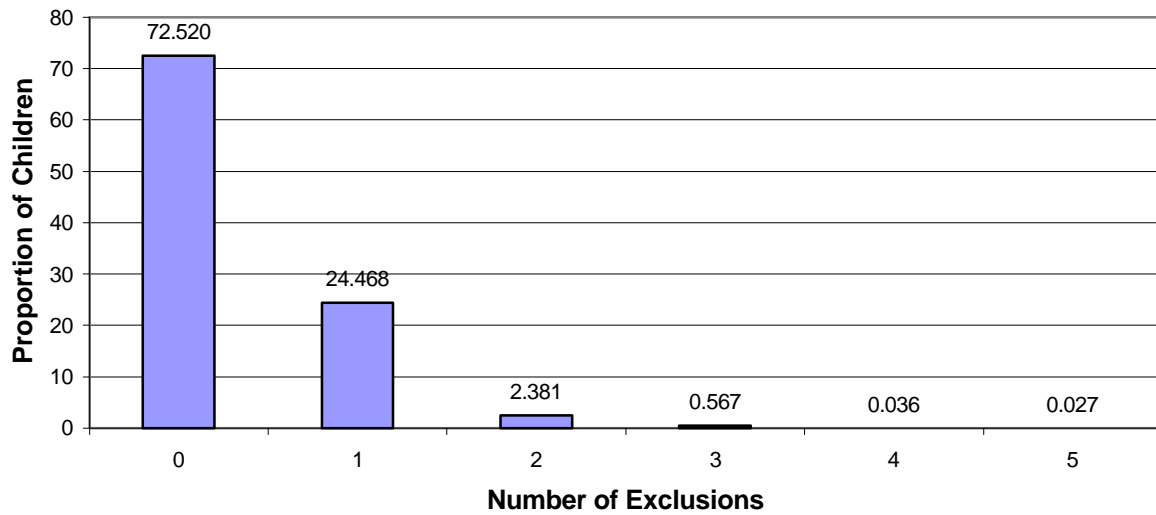


Figure 4
Number of Dimensions in Which Child is Socially Excluded
United States Ages 6-9

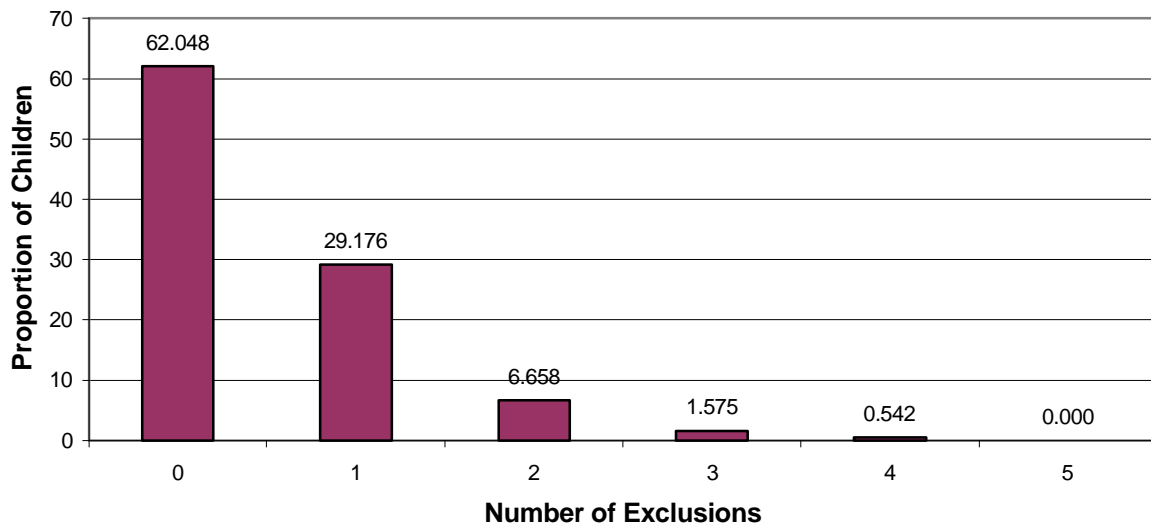


Figure 5
Number of Dimensions in Which Child is Socially Excluded
Canada Ages 10-13

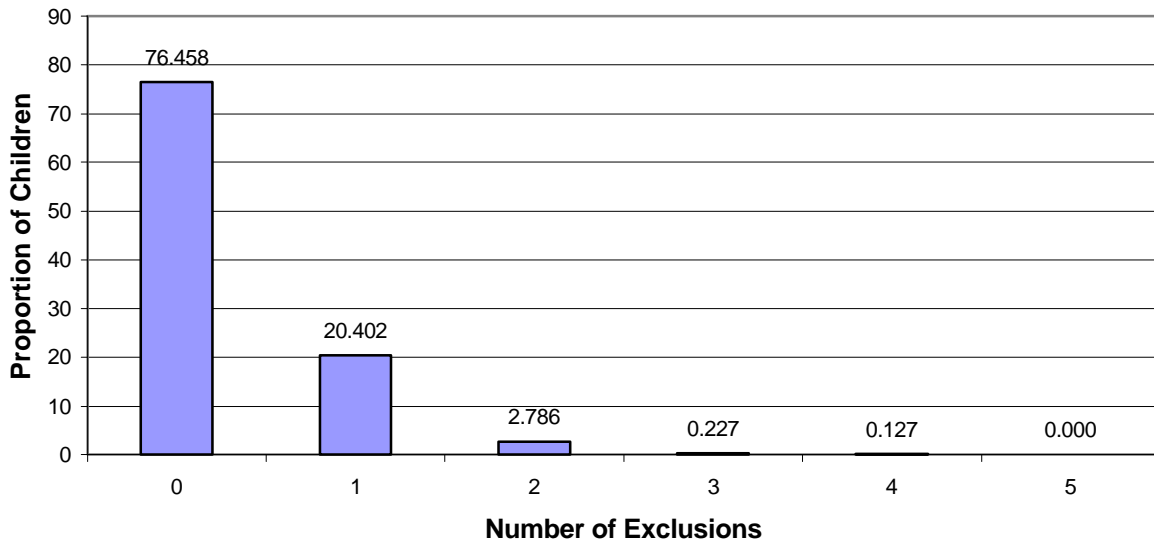
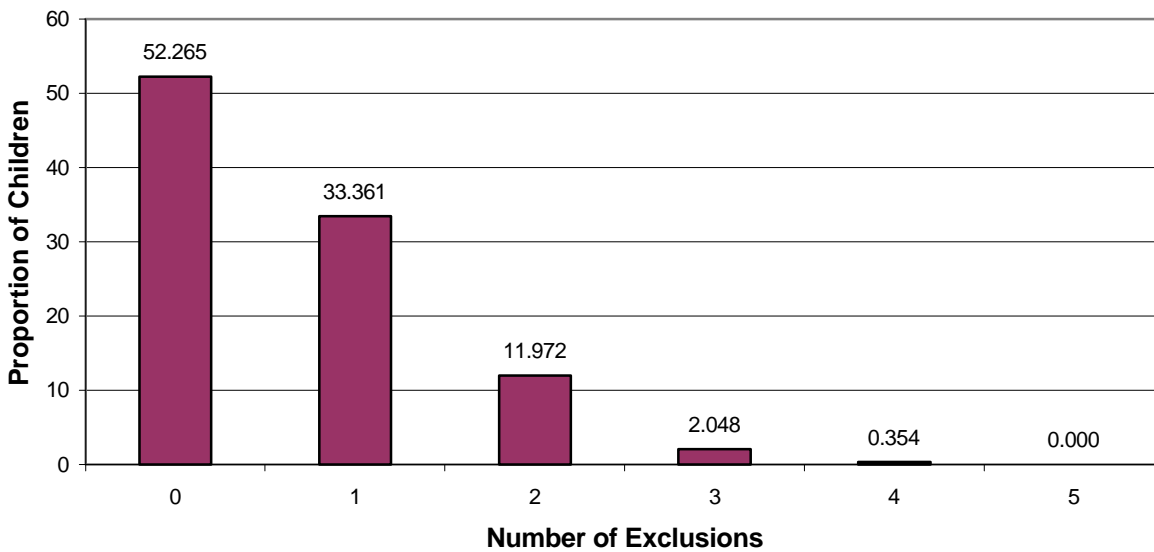


Figure 6
Number of Dimensions in Which Child is Socially Excluded
United States Ages 10-13

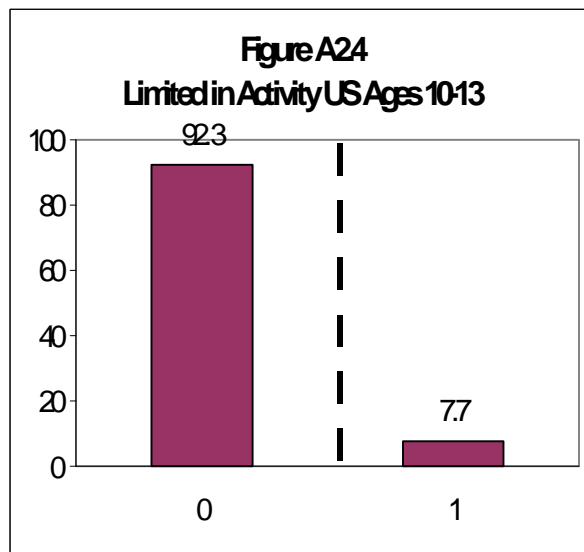
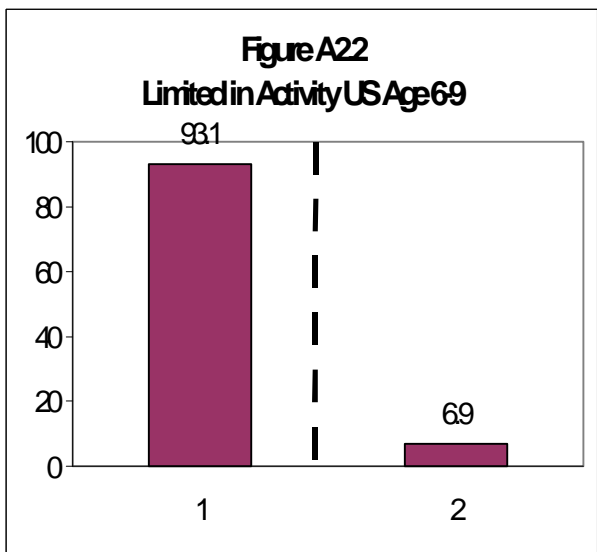
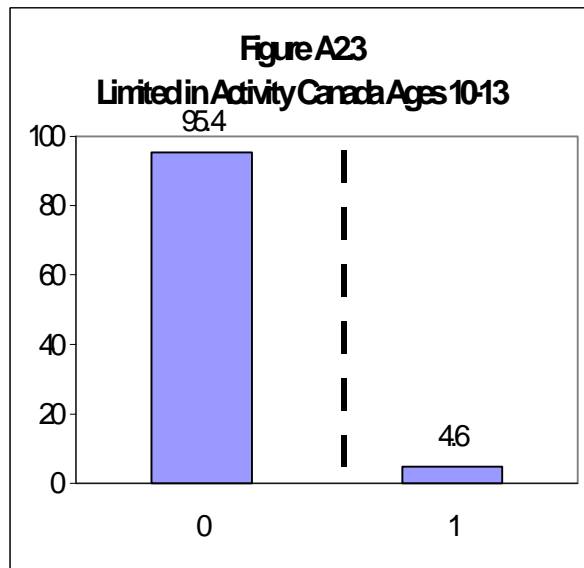
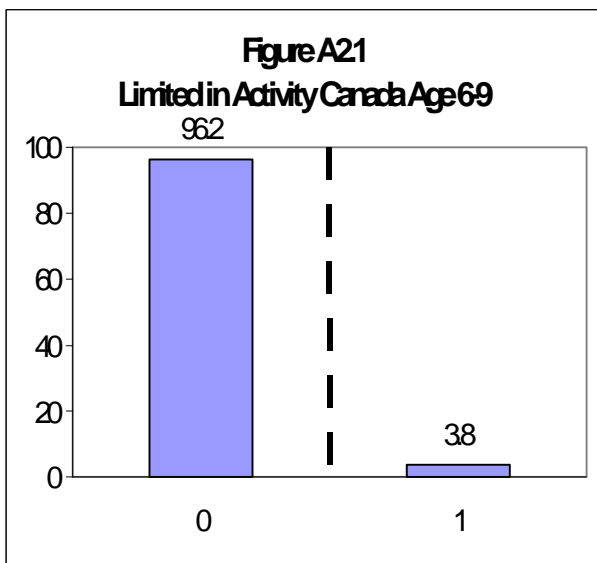


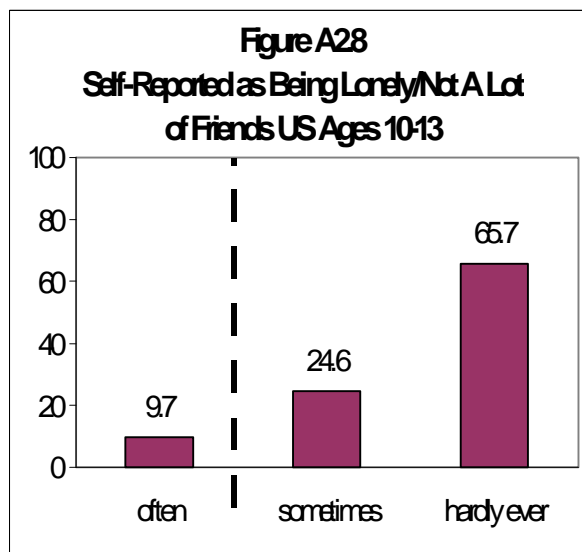
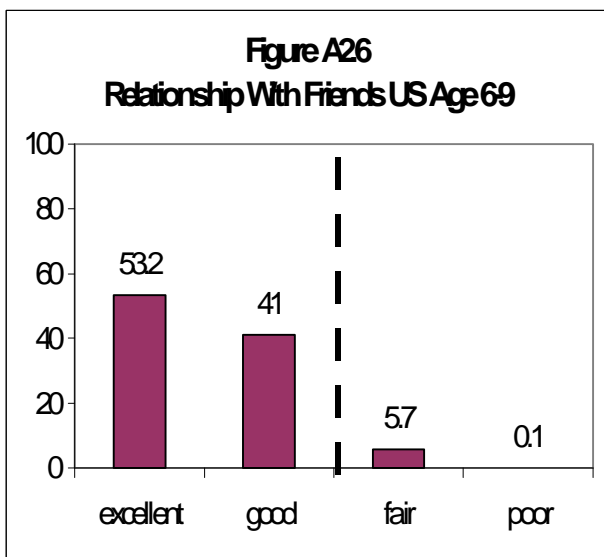
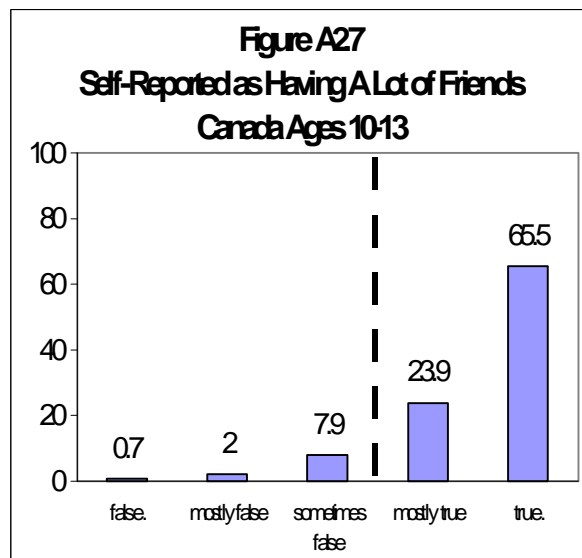
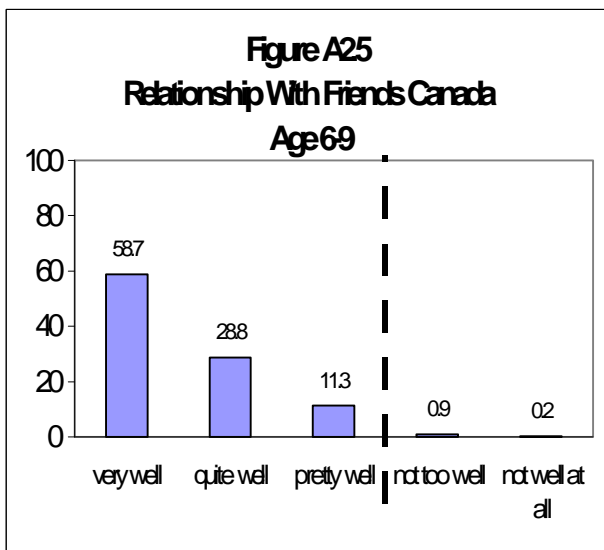
APPENDIX 1

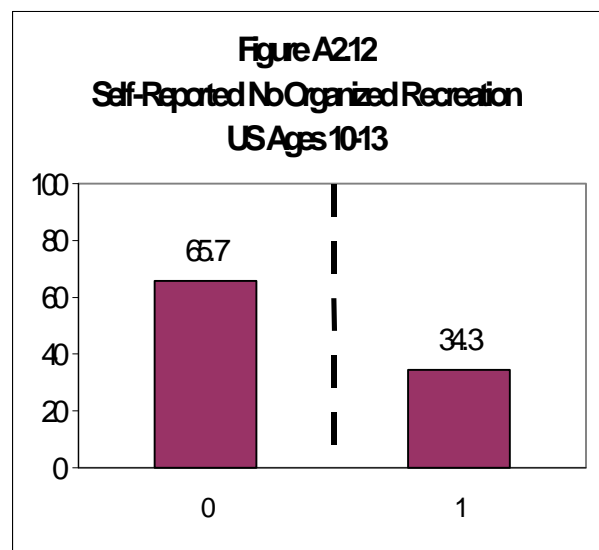
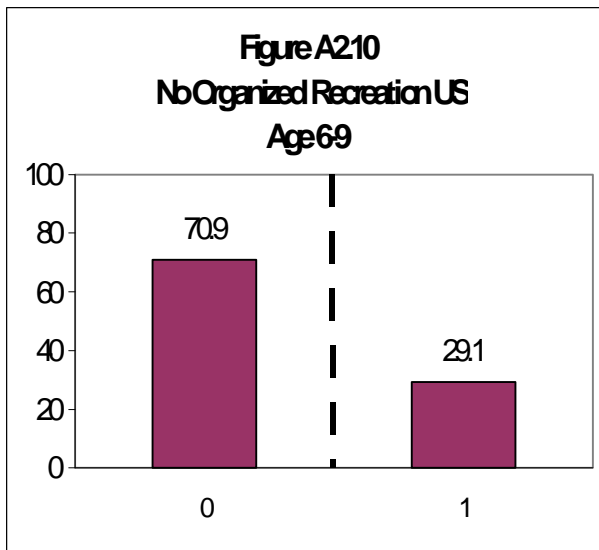
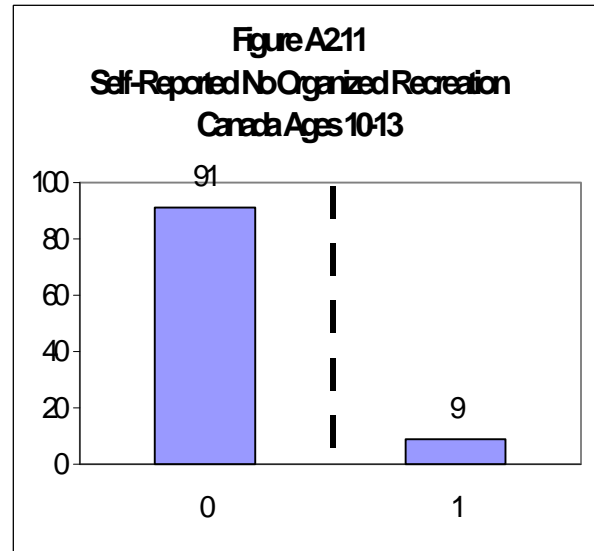
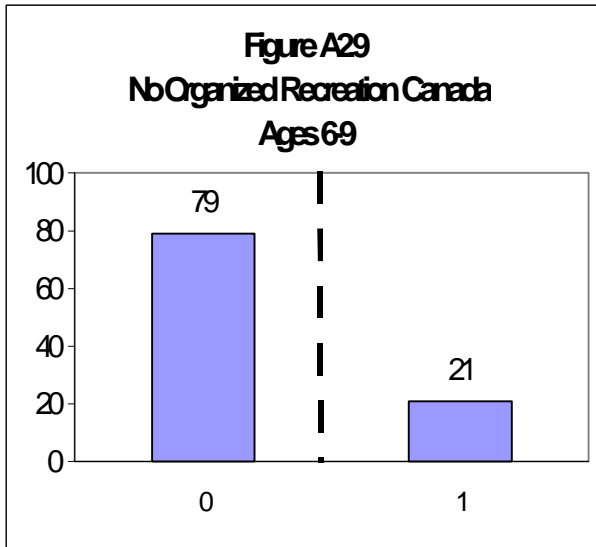
Appendix Table 1 Exclusion Questions - Canada and the United States		
	Canada	United States
Health	In general would you say you child's health is:	Think now about how things are going in general in your child's life. Please rate each of the following parts of your child's life as either excellent, good, only fair, or poor.
	<ol style="list-style-type: none"> 1. Excellent 2. Very good 3. Good <hr/> <ol style="list-style-type: none"> 4. Fair 5. Poor 	<ol style="list-style-type: none"> a. (His/Her) health <ol style="list-style-type: none"> 4. Excellent 3. Good <hr/> <ol style="list-style-type: none"> 2. Fair 1. Poor
Success at School	Based on your knowledge of his/her school work including report cards, how is your child doing overall:	Is your child (CIRCLE ONE)
	<ol style="list-style-type: none"> 1. Very well 2. Well 3. Average <hr/> <ol style="list-style-type: none"> 4. Poorly 5. Very poorly 	<ol style="list-style-type: none"> 1. one of the best students in class? 2. above the middle? 3. in the middle? <hr/> <ol style="list-style-type: none"> 4. below the middle? 5. near the bottom of the class?
Limited in Activities	Does child have any long term conditions or health problems which prevent or limit his/her participation in school, at play, or any other activity for a child of his her age?:	Does your child have any physical, emotional, or mental condition that limits or prevents his/her ability to:
	<ol style="list-style-type: none"> 1. No <hr/> <ol style="list-style-type: none"> 2. Yes 	<ol style="list-style-type: none"> A. Attend school regularly B. do regular school work C. do usual childhood activities such as play, or participate in games or sports <ol style="list-style-type: none"> 1. No <hr/> <ol style="list-style-type: none"> 2. Yes
Friends	<i>Ages 6-9</i> In the past 6 months, how well has your child gotten along with other kids such as friends or classmates (excluding brothers or sisters)?:	<i>Ages 6-9</i> Think now about how things are going in general in your child's life. Please rate each of the following parts of your child's life as either excellent, good, only fair, or poor.
	<ol style="list-style-type: none"> 1. Very well, no problems 2. Quite well, hardly any problems 3. Pretty well, occasional problems <hr/> <ol style="list-style-type: none"> 4. Not too well frequent problems 5. Not well at all, constant problems 	<ol style="list-style-type: none"> a. His/her friendships <ol style="list-style-type: none"> 1. Excellent 2. Good <hr/> <ol style="list-style-type: none"> 3. Fair 4. Poor

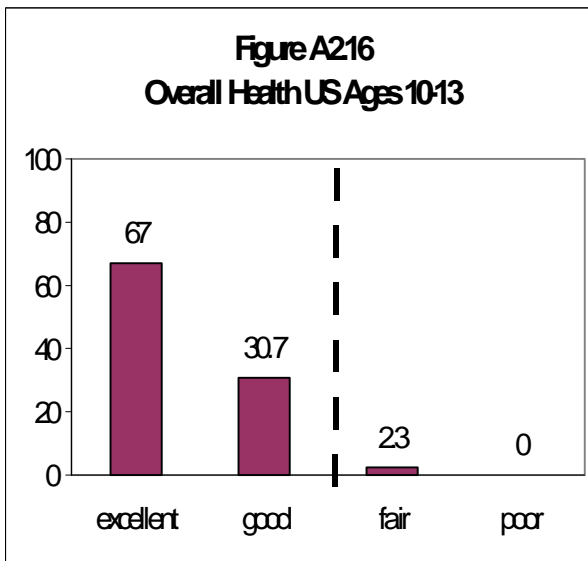
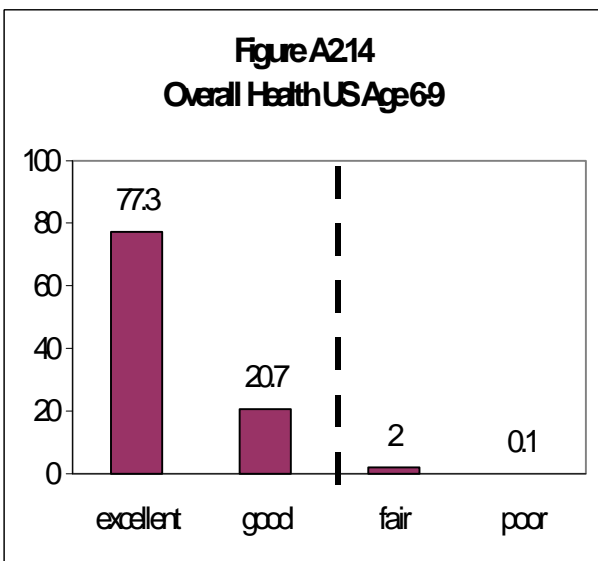
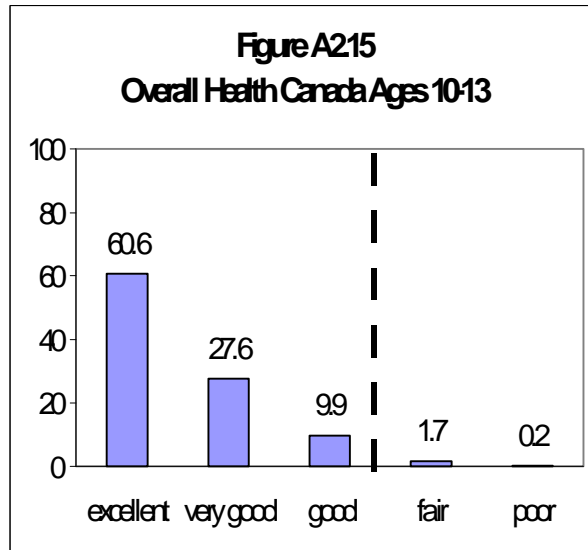
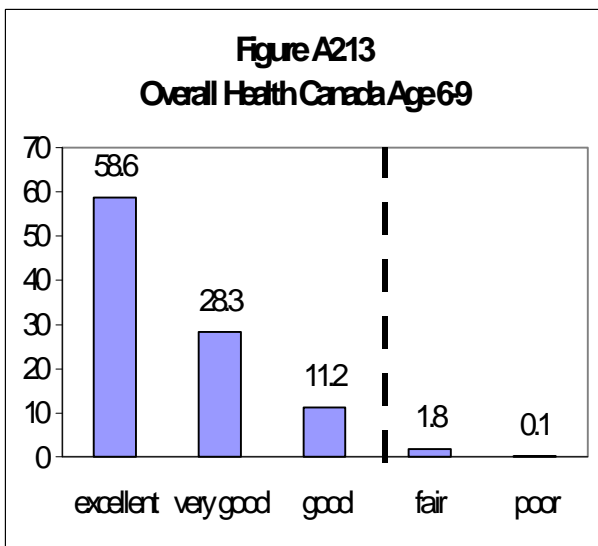
	<p><i>Ages 10-13</i> I have a lot of friends:</p> <ol style="list-style-type: none"> 1. Mostly true 2. True <hr/> <ol style="list-style-type: none"> 3. False 4. Mostly false 5. Sometimes false/Sometimes true 	<p><i>Ages 10-13</i> How often do you feel lonely and wish you had more friends?</p> <ol style="list-style-type: none"> 1. Hardly ever 2. Sometimes <hr/> <ol style="list-style-type: none"> 3. Often
Participates in Activities	<p><i>Ages 6-9</i> In the last 12 months, outside of school hours, how often has your child:</p> <p>A. taken part in sports with a coach (except dance and gymnastics):</p> <p>B. taken lessons or instruction in other organized physical activities with a coach or instructor such as dance, gymnastics or martial arts:</p> <p>C. taken lessons or instruction in music, art or other non-sport activities:</p> <p>D. taken part in any clubs, groups or community programs with leadership such as Brownies, cubs or church groups:</p> <ol style="list-style-type: none"> 1. Most days 2. A few times a week 3. About once a week 4. About once a month <hr/> <ol style="list-style-type: none"> 5. Almost never 	<p><i>Ages 6-9</i> Does your child get special lessons or belong to any organization that encourages activities such as sports, music, art, dance, drama, etc.?</p> <ol style="list-style-type: none"> 1. Yes <hr/> <ol style="list-style-type: none"> 2. No
	<p><i>Ages 10-13</i> In the past year (last 12 months), how often have you:</p> <p>A. taken part in art, drama or music groups, clubs or lessons outside of class:</p> <p>C. played sports WITH a coach or instructor, other than in gym class (school teams, swimming lessons etc.)</p> <p>B. taken part in dance, gymnastics or cheer leading groups or lessons, other than in gym class</p> <p>D. taken part in clubs or groups such as Guides or Scouts, 4-H club, community, church or other religious groups:</p> <ol style="list-style-type: none"> 1. less than once a week 2. times a week 3. 4 or more times a week <hr/> <ol style="list-style-type: none"> 4. never 	<p><i>Ages 10-13</i> Do you belong to any clubs, teams, or school activities, either in or out of school?</p> <ol style="list-style-type: none"> 1. Yes <hr/> <ol style="list-style-type: none"> 2. No

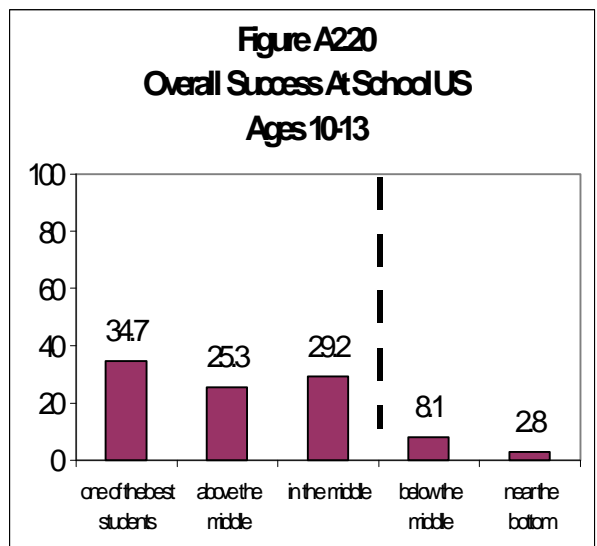
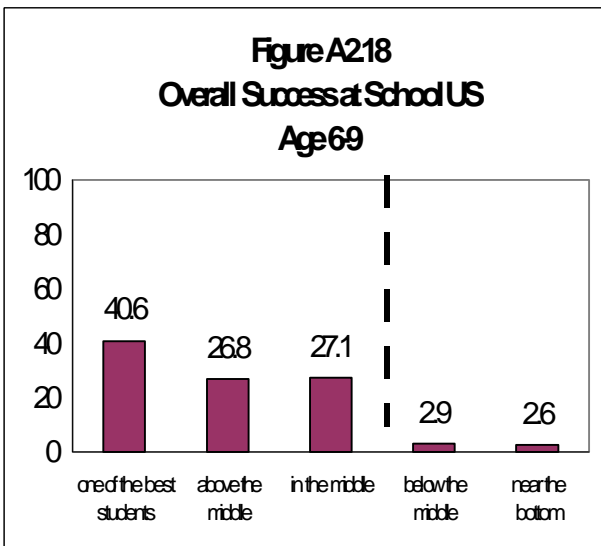
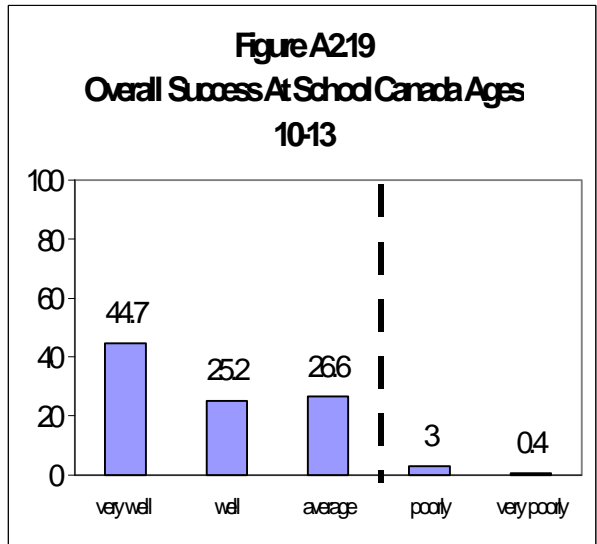
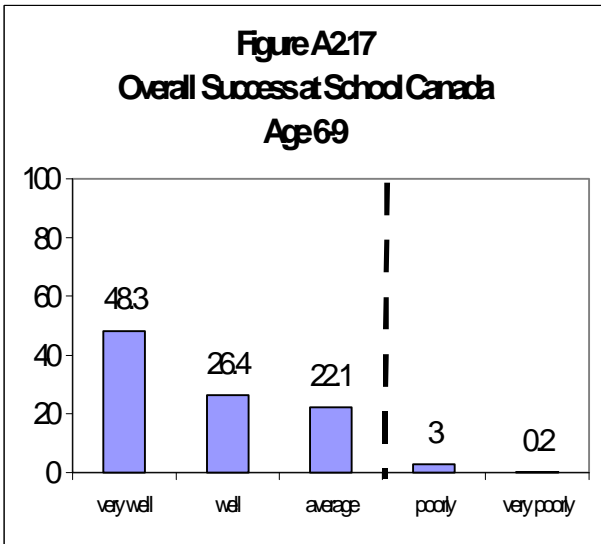
APPENDIX 2











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